

REMARKS

Applicant acknowledges that Claims 7, 11, and 12 have been objected to as being dependent upon a rejected base claim. At this time applicants have not rewritten these claims in independent form. Applicants reserve the right to amend Claims 7, 11, and 12 at a later time as suggested by the examiner.

Claims 1-3 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 99/62691 to Cohen ("Cohen"), U.S. Patent No. 6,280,554 to Lambert et al. ("Lambert"), U.S. Patent No. 5,324,371 to Mehoudar ("Mehoudar") and U.S. Patent No. 5,016,182 to Bergland et al. ("Bergland"). Claims 4, 9, and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cohen, Lambert, Mehoudar, and Bergland as applied to claims 1-3, and further in view of U.S. Patent No. 6,896,758 to Giuffre ("Giuffre"). Claims 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cohen, Lambert, Mehoudar, Bergland, and Giuffre as applied to Claim 4, and further in view of U.S. Publication 2001/0053116A1 to Sato ("Sato") and U.S. Patent No. 2,048,942 to McConnell ("McConnell"). Applicants disagree and request reconsideration of the claims.

The office action indicates that Cohen discloses all of the elements of claim 1, but admits that Cohen does not disclose the shape of the pressing roller. Applicants add that Cohen also does not disclose a marking structure as claimed and the office action is silent in this respect. The office action relies on Figure 4 of Lambert for the shape of the pressing roller. Lambert states that given the softness of lining 23 of belt 22 the latter has no difficulty in matching the shape imprinted by face 1a of the dripper unit onto conduit 2. Col. 5, lines 36-38. The office action admits that neither Cohen nor Lambert disclose marking the locations of the dripper on the tube and thus do not disclose a marking structure as claimed.

Mehoudar is directed toward a process for producing drip irrigation conduit. Abst. Mehoudar discloses that the location of the emitters 6 within the conduit 13 are sensed and the conduit 13 then passes the aperturing station 11 where it is apertured in positions corresponding to the emitter outlets. Col. 4, lines 62-65. The office action admits, while Mehoudar indicates that the emitters are sensed, it does not disclose exactly how the locations are determined.

Applicants agree and add that Mehoudar also does not discuss marking the locations of the emitters or make any reference to a marking structure.

The office action relies on Bergland for subject matter related to a marking structure. Bergland discloses pre-printed blanks formed by running a continuous paperboard web through web processing apparatus which typically comprises a multicolor gravure type printing press and a cutter-creaser press located downstream of the printing press. The printing press comprises a series of printing stations, one for each color, which cooperate to form a succession of multicolor printed impressions and associated register marks on the web. Each printing station comprises a rotary impression cylinder which has a certain circumference or repeat length. Col. 1, lines 12-24. The cutter-creaser press comprises a pair of continuously rotating metering rolls, Col. 1, lines 37-38, and components which ensure that the impressions on the web properly register with the cutting zone, Col. 1, lines 43-44. Proper registration of the blades in the cutting zone and a printed impression on the web is obtained by matching the surface speed [feed-up] of the metering rolls to a specific printed mark applied by the impression cylinder. Col. 1, lines 60-64.

The rejection of Claims 1-12 under 35 U.S.C. § 103(a) is improper because the rejections rely on hindsight in combining four references to reject independent Claim 1 and up to six references to reject dependent Claims 5 and 6. The Supreme Court recently stated “[i]nventions usually rely upon building blocks long since uncovered, and claimed discoveries almost necessarily will be combinations of what, in some sense, is already known.” *KSR International Co., v. Teleflex, Inc.*, 127 S.Ct. 1727, 1731 (2007). “A factfinder should be aware, of course, of the distortion caused by hindsight bias.” *Id.* at 1742. The Supreme Court has stated where to look “to determine whether there was an apparent reason to combine the known elements.” The Court lists (1) “interrelated teachings of multiple patents;” (2) “effects of demands known to the design community or present in the marketplace,” and (3) “background knowledge possessed by a person having ordinary skill in the art.” 127 S.Ct. at 1731.

In the instant application, there are no reasons in the record or otherwise to combine Cohen, Lambert, and Mehoudar in the manner suggested by the Examiner. Regarding Bergland, the office action states “[i]t would have been obvious . . . to apply ink to the pressing roller of Cohen and Lambert which would mark the location of the drippers since this would allow the

dripper locations to be easily determinable for later aperture placement and since Bergland discloses using sensors to insure that cutting occurs in the desired locations based on the location of the printing.” However, Mehoudar indicates that sensors already exist for locating dosing elements when it states that “the location of the emitter units . . . are sensed.” Thus, there would be no motivation to combine Bergland for the purpose of locating dosing elements because technology for doing so already exists in the art.

In contrast to the teachings of *KSR International Co., v. Teleflex, Inc.*, the office action has improperly used the claims as a roadmap in searching for art which discloses each element of the claims and disclosed no motivation in the prior art or otherwise as to why a person of skill in the art would look to Bergland for modification of Cohen, Lambert, and Mehoudar. In view of the foregoing, Applicant requests withdrawal of the rejection of the claims under 35 U.S.C. § 103(a).

Even if the Examiner’s combination of references is proper, Claim 1 is patentable by calling for a device for continuous manufacture of drip irrigation tubes to the type set forth therein provided with a pressing roller having an indentation that corresponds to the outer contour of the tube body in the region of the calibrating device and having a bottom provided with a marking structure, the pressing roller being configured to cause the marking structure to provide a mark on the surface of the tube body in the region of the respective dosing element so as to facilitate locating the respective dosing element in the tube body when placing an outlet aperture through the tube body and the respective dosing element. In contrast, the impression cylinder of Bergland marks the paperboard web at repeating registered lengths based on the circumference or repeat length and not based on the condition of the substrate. Thus Bergland does not disclose a pressing element provided with a marking structure as called for in Claim 1 where the pressing roller is “configured to cause the marking structure to provide a mark . . . in the region of the respective dosing element.”

The advantage of the claimed marking device is its ability to maintain accurate marking of dosing elements even in light of the variability in their location. Various tolerances and mechanical movements in the current devices may create slight variations in the locations and spacing of the dosing elements in the tube. Additionally, during the pulling of the tube through

current devices, slight changes in the length of the tube may occur, thus affecting the spacing of the dosing elements in the tube. The “marking of the surface of the tube body makes it possible for the position of the dosing element . . . to be precisely determinable from outside . . . regardless of the spacing apart of the dosing elements.” Spec. Page 3, lines 21-24. The impression cylinder of Bergland would not suffice because a simple repeating pattern of impressions would not account for the variability of the locations of the dosing elements.

The claimed marking device is even advantageous in light of known feelers, such as that eluded to by Mehoudar, because these feelers cannot determine the location of dosing bodies on thick-walled tubes where a bulge in the tube wall may not be present. The invention as claimed can properly mark the location of dosing elements on thick-walled as well as thin-walled tubes and take into account the variability in the location of dosing elements in the tubes.

Claims 2-6, 8-10 and new Claim 13 depend from Claim 1 and are patentable for the same reasons as Claim 1 and by reason of the additional limitations called for therein. For example, Claim 13 is additionally patentable by calling for “a pattern on the surface of the pressing roller configured to create a physical impression on the tube body.”

New independent Claim 14 is patentable by calling for “a pattern on the surface of the pressing roller configured to create a physical impression on the surface of the extruded tube body.” Nothing of record suggests or discloses a pattern configured to create a physical impression on an extruded tube.

New Claims 15-18 depend from Claim 14 and are patentable for the same reasons as Claim 14 and by reason of the additional limitations called for therein.

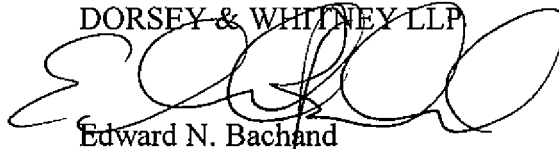
New Claim 19 is different in scope than the claims of record and patentable by calling for a device for the continuous manufacture of drip irrigation tube having a tube body provided with inner and outer surfaces and a plurality of dosing elements longitudinally spaced apart within the tube body, comprising an extruding device adapted to continuously create the tube body, a placement device having at least a portion disposed within the tube body for selectively pressing the plurality of dosing elements in predetermined longitudinally spaced-apart positions against the inner surface of the tube body and a marking device for marking the outer surface of the tube

body in the vicinity of each of the plurality of dosing elements for facilitating the location of the plurality of dosing elements when forming an aperture through the tube body at each of the plurality of dosing elements. As discussed above, none of the cited references disclose a device of the type called for in Claim 19 having a marking device for marking the outer surface of the tube body in the vicinity of each of the plurality of dosing elements for facilitating the location of the plurality of dosing elements when forming an aperture through the tube body at each of the plurality of dosing elements.

New Claims 20-23 depend from Claim 19 and are patentable for the same reasons as Claim 19 and by reason of the additional limitations called for therein.

In view of the foregoing, it is respectfully submitted that the claims of record are allowable and that the application should be passed to issue. Should the Examiner believe that the application is not in a condition for allowance and that a telephone interview would help further prosecution of this case, the Examiner is requested to contact the undersigned attorney at the phone number below.

Respectfully submitted,
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